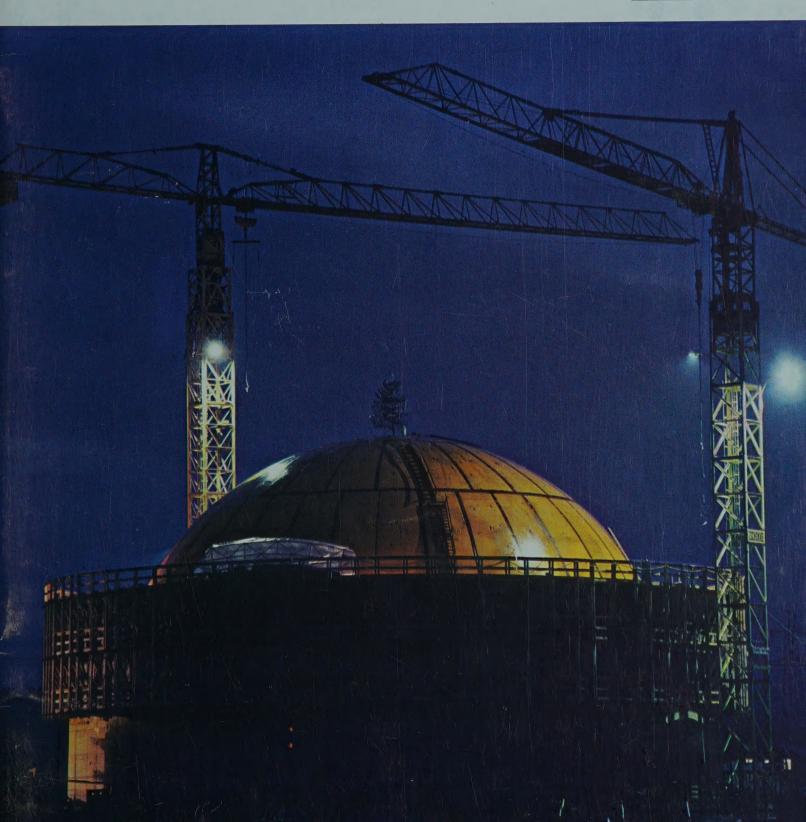
1966 Annual Report







On the Cover

As consulting engineers to Westinghouse Electric International Company, Dravo subsidiary, Gibbs & Hill, Inc., provided architectural and major consulting and engineering services for the design of the nuclear portion of this 350-megawatt power station now being constructed near Zurich, Switzerland. To be owned and operated by Nordostschweizerische Kraftwerke AG (NOK), the facility will utilize the largest pressurized water reactors on the will utilize the largest pressurized water reactor on the European continent.

ANNUAL MEETING

Annual Stockholders' Meeting of Dravo Corporation will be held April 27, 1967 at the company's Neville Island Plant, Pittsburgh, Pennsylvania. Formal notice of this meeting and proxy material will be mailed to stockholders about March 31, 1967.

TRANSFER AGENT

Pittsburgh National Bank, Pittsburgh, Pa.

The Union National Bank of Pittsburgh, Pittsburgh, Pa.

EXECUTIVE AND GENERAL OFFICES

Pittsburgh, Pennsylvania 15222

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DRAVO CORPORATION . ANNUAL REPORT 1966

Highlights

	1966	1965	1964
Revenue (work completed)	\$146,345,000	\$165,232,000	\$114,098,000
Net income	3,737,000	4,805,000	4,165,000
Earnings per common share	\$3.60	\$4.65	\$3.96
Dividends declared per common share	1.60	2.00	1.65
Billings for work performed	\$247,018,000	\$191,475,000	\$160,516,000
Backlog at year end	242,955,000	213,107,000	160,909,000
Working capital	\$ 26,699,000	\$ 17,251,000	\$ 20,615,000
Long-term debt	22,259,000	8,650,000	5,890,000
Stockholders' equity	59,158,000	57,277,000	55,768,000
Capital expenditures	\$ 11,510,000	\$ 11,625,000	\$ 6,976,000
Depreciation	5,658,000	4,482,000	4,076,000
Property, plant, equipment—net book value	56,922,000	52,509,000	45,916,000
Common stock shares outstanding	1,010,233	1,013,592	1,018,499
Stockholders at year end	3,751	3,554	2,995
Employees at year end	6,713	6,408	5,627

To the Stockholders:

Net income equal to \$3.60 per common share was below the \$4.65 earned in 1965.

Your company has been engaged, in recent years, on a program of growth aimed at expanding its business base and volume. The momentum we have generated toward these objectives was continued in 1966. New highs were established in work performed, in bookings of new business and in year-end backlog.

A serious shortage of skilled manpower had a direct effect on profits in our heavy fabrication operations. The resultant production inefficiencies and schedule disruptions hampered efforts to handle an unusually heavy backlog of work. Our \$4-million plant expansion program at Neville Island was well along at year end, with some new facilities already in use. The increased capacity, along with a more stabilized manpower situation, is producing improved results.

The cost of financing our high level of work was up appreciably. Interest expense is charged against current operations, although much of it is applicable to long-term construction projects on which revenue and profits are not reported until sometime in the future.

Our method of accounting on large contracts had a significant bearing on overall results in 1966. Although we are reporting total revenue (see Highlights, opposite page) of only \$146 million, actual work performed was valued at \$247 million. This is \$56 million above the previous high of \$191 million in 1965. Much of the work performed in 1966 was on contracts still in progress at the end of the year. Under our "completed contract" accounting policy, none of this is reflected in operating results until the jobs are finished. The major effect of this practice is felt in our construction activities.

Growth in both revenue and net income remain as principal objectives of our long-range planning. What has been accomplished can be seen in the following summary which shows percentage of change between the last two five-year periods.

	1957-61	1962-66	
	Annual Average	Annual Average	Change
Revenue (in millions)	\$102.2	\$136.1	+ 33%
Work performed (in millions)	105.9	167.8	+ 58%
Year-end backlog (in millions)	75.5	155.0	+105%
Net income (dollars per share)	2.40	3.77	+ 57%

I urge you to read the balance of this report to obtain a comprehensive picture of your company as it enters its 76th year. Included are further comments on factors affecting 1966 results as well as on products, plans, domestic and international markets, and various developments that will influence our future.

Based on new order bookings of \$243 million and \$266 million the past two years—and a record high \$243-million backlog at the beginning of this year—we are forecasting that both revenue and net income in the current year will be substantially above 1966.

Earlier this year, your Board of Directors expressed its confidence in the company's future by raising the common stock quarterly dividend rate to 50 cents per share.

We acknowledge with deep gratitude the faithful service of Carl B. Jansen and Lawrence Litchfield, Jr., both of whom resigned from the Board last year. In recognition of Mr. Jansen's contributions to his company—during a 44-year career as engineer, manager, president and chairman—our Board conferred on him the title, Honorary Chairman.

In closing, it is with deep regret that I report the loss of a valued friend and associate, David B. Sloan, who died last November. Mr. Sloan was president of our subsidiary, Gibbs & Hill, Inc., and had been a director of Dravo Corporation since 1965 when the consulting engineering firm was acquired by Dravo.

Respectfully submitted,

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President

CONSTRUCTION

Process, engineering construction up

Operations were substantially above 1965. New contract awards were about 15 per cent above the previous year and this activity entered 1967 with a larger backlog of unfinished work than ever before.

The Dravo-Lurgi traveling grate pelletizing process continues to account for a sizable volume of business. Plants completed or under construction by Dravo represent more than one-third of world iron ore pellet capacity.

Two pelletizing projects were completed at the San Nicolas, Peru, plant of Marcona Mining Company. Revisions to the No. 1 pelletizing line and addition of a second line trebled the facility's previous capacity.

Five other pelletizing projects were under construction at year end. In Labrador, the fifth and sixth lines are being added to a Carol Pellet Company plant built earlier by Dravo. The other four, all new facilities, are for Hamersley Iron Pty. Ltd. at Dampier, Western Australia; LAMCO in Liberia, Africa; Pilot Knob Pellet Company in Missouri; and Steep Rock Iron Mines Limited at Atikokan, Ontario. The Australian and African projects are our first on these continents, and the job in Missouri is our first pelletizing contract to include the concentrator section of an ore processing facility. Estimated completion dates for this pelletizing work extend through 1967 and 1968.

BOF activity continues

Further progress was made in the BOF (basic oxygen furnace) field with completion of a facility for Allegheny Ludlum Steel Corporation and start of construction of a two-vessel, top-blown oxygen converter shop for Crucible Steel Company of America. The latter project is specially designed for application of oxygen steelmaking to production of stainless steel.

Among major contracts completed were two lime calcining plants for Bethlehem Steel Corporation; a steam generating unit for Crucible Steel; a synthetic fuel plant for Consolidation Coal Company (a project sponsored by the U. S. Office of Coal Research) that will be used as a pilot facility to explore the feasibility of converting coal into gasoline; and a hydrochloric acid regeneration plant. Contract for the latter covered engineering and supply of components for a Japanese steel producer.

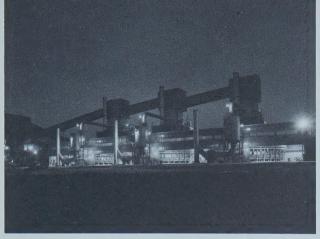
Continuous casting processes added

Late in 1966, we concluded license agreements with Gebr. Boehler & Company, of Vienna, covering design and manufacture of continuous casting facilities and a new strand reduction process which is used with the casting operation. In the reduction process, the cast section is immediately reduced by rolling, in line with the casting machine and before full internal solidification takes place.

With the Boehler agreements, Dravo now offers complete, overall responsibility services in three significant areas of steel industry technology: ore beneficiation and agglomeration; basic oxygen steelmaking; and continuous casting. We also design, engineer and construct



Scale model assists engineers design iron ore concentrator.

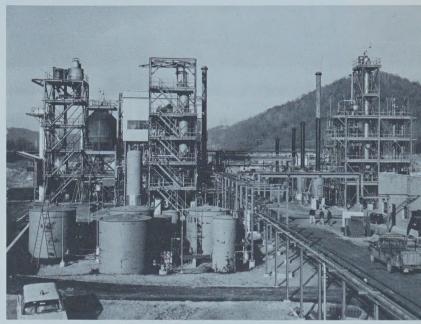


Calcining plant supplies lime used as flux in BOF steelmaking.

such process facilities as lime burning, hydrochloric acid regeneration, hot blast cupolas, tonnage oxygen and vacuum degassing.

Process work forecast remains high

The potential for process and engineering construction is good. The competent design, project management and construction organization we have developed is capable of undertaking a wide range of projects, not only in our present areas of activity, but also in other fields where our process knowledge can be offered to a larger number and variety of customers.



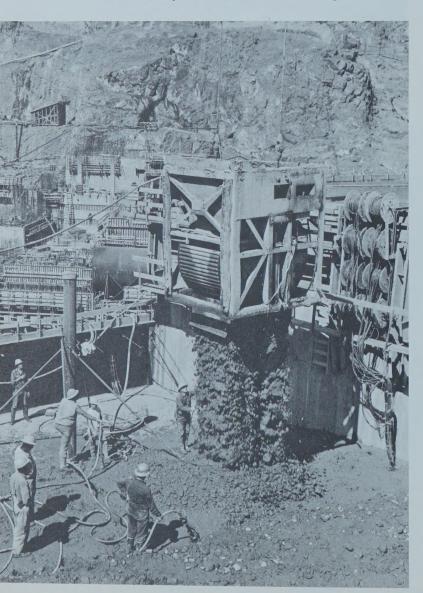
Synthetic fuel plant is pilot for coal-to-gasoline research.



Two-vessel BOF plant and a basic hot blast cupola were built at Natrona, Pa. for Allegheny Ludlum Steel Corporation.



Western headquarters are in this new building near Seattle.



\$131-million dam to be third highest

The largest heavy construction contract in which the company has ever participated was awarded last summer to a Dravo-sponsored joint venture, in which we have a 25 per cent interest. The \$131-million Dworshak Dam in northern Idaho, when finished in 1972, will be the third highest concrete dam in the United States and will impound $3\frac{1}{2}$ million acre feet of water.

Dworshak's 673-foot height will compare with 726 feet for Colorado's Hoover Dam and 710 feet for Arizona's Glen Canyon Dam.

Near Tacoma, Washington, work on the Mossyrock hydroelectric dam and powerhouse passed the half-way mark. A high-speed cableway, monitored by closed-circuit television, was instrumental in helping the job force place more than 100,000 cubic yards of concrete in 23 working days last August.

Exchequer and McSwain dams and powerhouses, on the Merced River in California, are expected to be fully operational in the first half of 1967. The \$55-million (Canadian) Arrow Dam water storage and flood control project, a joint venture sponsored by Foundation Company of Canada Limited, was 60 per cent complete at year end and ahead of construction schedule.

Western operations in new fields

Our construction activities in the western part of the country were expanded. We are participating in a joint venture to furnish and install a 62-mile pipeline to supply fuel to Elmendorf Air Force Base, near Anchorage, Alaska. This \$6.6-million contract also includes terminal and transfer facilities at Whittier, Alaska. Along the Columbia River in Oregon, we are using high-speed rail-placing equipment to install 88 miles of continuous-welded railroad track for one of the most modern railway systems in the United States. Another contract was for a short section of track in Washington.

Volume high on Ohio, Arkansas Rivers

In the east, a number of major projects were underway. A \$24.5-million contract was received early in the year for construction of Newburgh Locks on the Ohio River at Newburgh, Indiana. At Letart, West Virginia, work continued on schedule at Racine Locks. In the past 12 years, Dravo participation in the Ohio River modernization program totals 10 projects valued at more than

Crew at Mossyrock Dam project, near Tacoma, Washington, set record pace in placing concrete during August of 1966.

\$120 million. Markland Power Station, first hydroelectric generating facility associated with new Ohio River dams, was in partial operation by Public Service Indiana late in the year.

Work began near Fort Smith, Arkansas, on the \$13.1-million Arkansas Lock and Dam No. 13. At Lock and Dam No. 6, near Little Rock, second phase construction began early in 1967. The company is also involved in Ozark Lock and Dam through a joint venture sponsored by Al Johnson Construction Company. These are among 17 lock and dam projects that are part of a \$1.2-billion Federal program to expand water transportation, flood

Markland Power Station, a hydroelectric facility for Public Service Indiana, has three 27,000-kilowatt turbogenerators.





Exchequer Dam will impound water for irrigation and hydroelectric purposes, help control flooding in California's Merced Valley.

control and hydroelectric power along more than 400 miles of the Arkansas and Verdigris River basins. Total value of Dravo contracts in this area, including our share of the joint venture, is more than \$44 million.

Opekiska Dam, on the Monongahela River near Fairmont, West Virginia, was nearly completed at year end.

Docks and terminals for industry

Industrial expansion along the nation's waterways, keyed to the need for process water and availability of economical river transportation, also contributed significantly to our 1966 operations. Dock and terminal facilities were underway in Ohio, West Virginia, Kentucky, Iowa and Louisiana to handle such commodities as coal, aggregates and a variety of liquid and bulk chemicals. One of these is a million-dollar installation at a new fertilizer plant for which Dravo will design and erect the docks as well as the materials handling equipment for both liquid and bulk materials.

California tunnels progressing

Excellent progress was made on the Carley V. Porter project. This 4.7-mile tunnel, a \$33.8-million joint venture sponsored by Dravo, will be part of an aqueduct system being constructed in California by the state's Department of Water Resources.

Eighty miles southeast of San Francisco, our crews completed excavation work on the \$5-million Pacheco Tunnel project. It is part of an 11-mile tunnel that the U. S. Bureau of Reclamation is constructing to carry water from the Diablo Mountains in northern California to the Santa Clara Valley. Considerable difficulty was encountered on this project, but it should be completed in the current year with retimbering and concrete lining yet to be done.

In addition to the two California tunnels, work was performed on 21 mine shafts. Seven new shaft awards were received, five in the United States and two in Canada.



First stage work on Arkansas River Lock and Dam No. 6 was completed in 1966.



Porter Tunnel is part of California Aqueduct.

MANUFACTURING

Production facilities expanded

More money was invested in capital improvements at our main Neville Island plant during 1966 than in any previous year, except for the expansion during World War II.

Major projects completed in the \$4-million program were additions to the barge and machine shops, a new steel storage bay, a westerly extension of the shipyard and improvements to the central yard area. Scheduled for early 1967 completion were expansion of the structural shop, including new production equipment, and installation of new machine tools in the machine shop.

The modernization program will provide additional capacity to handle the increase in business anticipated for marine, materials handling and other engineered products or equipment.

5,000th hull highlights shipbuilding

The 5,000th hull built by Dravo slid down the launching ways at the Neville Island plant last October, 51 years after our first piece of floating equipment, a deck barge, settled into the water in 1915.

The vessel marking this milestone was the 6,450-horsepower towboat, *Lillian Clark*, which was designed to push large tows on the middle and lower Mississippi River. A sister ship, the *Rita Barta*, was launched a month later. These two vessels and 50 barges, all ordered by Mississippi Valley Barge Line Company of St. Louis within a 14-month period, are valued at \$6.7 million.

\$4 million barge order

Dundee Cement Company, Dundee, Michigan, ordered 34 jumbo covered hopper barges valued in excess of \$4 million. This new fleet will enable Dundee to ship by river a large portion of the output of a new midwestern production plant being built to expand the company's marketing area.

Orders were received in 1966 for 132 barges and three towboats, bringing to 14 the number of towboats purchased from Dravo during the past three years. Backlog carried over into 1967 will ensure capacity operations well into the third quarter.

Heavy equipment line expands

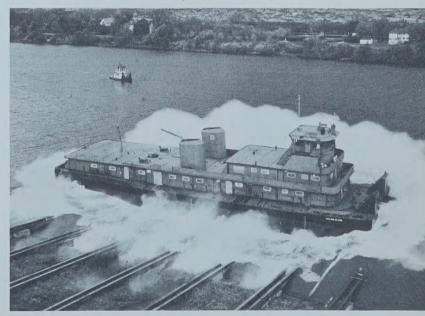
The value of contracts received to date for hoists and tainter gates scheduled for installation at dams in the Arkansas River improvement program rose to \$8.3 million. Included are more than 200 hoists. A substantial volume of work also is underway on culvert valves,

bulkheads and miter gate machinery for locks under construction on the Ohio River.

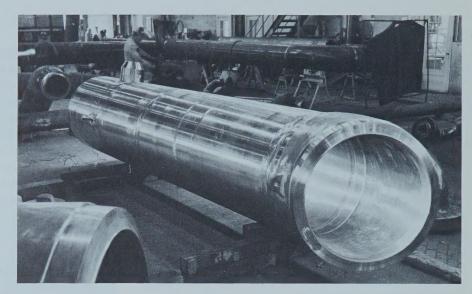
Research, product development and marketing efforts of the past several years have contributed to broadening our line of materials handling and related equipment. Sales efforts in 1966 produced orders from the steel industry for such items as ladle, slag pot and scrap box transfer cars, scrap chargers, product screens, vibro feeders and iron ore pelletizing discs.



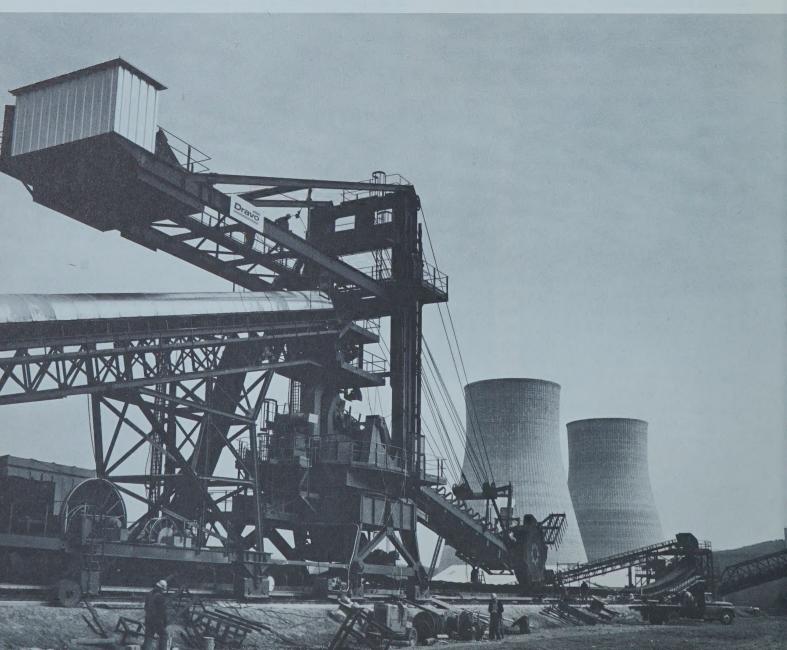
Barge No. 21, above, was first river vessel built by Dravo. Launched in 1915, it preceded by 51 years the completion of our 5000th hull, the 6,450-horsepower Lillian Clark, below.



Heavy-walled piping like this section for a nuclear power station is typical of increasing volume of work for electric utility companies.



This bucket wheel stocking and reclaiming machine will be heart of coal handling system serving a new mine-mouth generating station.



Materials handling for utilities

A contract was received for a continuous barge unloader which will provide high capacity coal handling for a new generating station to be operated by three Ohio electric utility companies. The unloader is similar to an installation at a huge Dravo-built terminal complex near New Orleans, Louisiana.

Erection of an automatic bucketwheel machine was completed for the 1,800-megawatt Keystone Power Station, near Indiana, Pennsylvania. This stacker-reclaimer will serve a mine-mouth, steam electric plant that will supply power for the seven utility company owners in four states.

Pipe fabrication grows in energy market

Success in expanding our volume of pipe fabrication business with the electric utility market was largely responsible for a second consecutive record-breaking year, with bookings of new business up about 30 per cent. Included were orders to supply fabricated piping for 12 generating units. At year end, backlog included work to be completed in 1967 and 1968 for plants with a total capacity of 7.5 million kilowatts.

A contract in excess of \$2 million provides for 1,500 tons of piping to be installed at the Tennessee Valley Authority's 1.15-million kilowatt Unit No. 3 being added to its Paradise Plant in Kentucky.

We continue as a principal supplier of fabricated piping for the main coolant systems of nuclear power stations. One 1966 contract covers stainless steel pipe for five units.

We anticipate a continuing good level of business from the electric utility industry which over the next seven years is planning to install new capacity that will exceed the total U. S. installed capacity of 1957. This sizable market, along with business opportunities in the chemical and other industries, should enable us to maintain a high level of pipe fabrication operations.

One of the first applications of T-1 steel for low temperature oxygen handling is in piping we fabricated for a Saturn S-10 dual test stand at NASA's George C. Marshall Space Flight Center in Mississippi. A substantial quantity of this special high-strength piping was fabricated by Dravo and involved special welding techniques, stringent quality control, and other procedures to meet pressure and low temperature requirements.

Record volume for environmental control

Sales of Dravo heating, ventilating and air-conditioning units—representing one of the most complete lines of environmental control equipment for industry—were 25

per cent above those of the previous year. This was an all-time high in business volume and took us into 1967 with a large backlog.

The new *Climaflow*, a combination air conditioning-ventilating-heating unit, has been well received by industry since its introduction two years ago. Designed for a wide range of applications, it is expected to be an increasingly important product in the years ahead.

The largest single environmental control system order, valued at over a half-million dollars, was for 92 heating and ventilating units to service a new facility in Ohio where small parts will be made by an automobile manufacturer.

Product and marketing development efforts have been very much a part of Dravo's success in this field. Considerable product research is underway and we are investigating the use of new components and redesign of others. During the year, we conducted symposiums in seven metropolitan areas to assist consulting, plant and utility engineers and contractors in the economic use of industrial air conditioning.

Grating sales up for seventh year

Revenue from sale of steel and aluminum grating was 24 per cent above that of 1965. This maintained an unbroken record of continuous increase in business volume during the seven years we have been manufacturing grating.

Plant capacity was increased with the addition of a second welding line. We are steadily broadening our marketing organization and, with the increased production capability, are forecasting further growth for this activity.



The Climaflow, newest in line of environmental control equipment, is roof-mounted here to heat and cool plant.



New eight-yard mixer trucks expand fleet for delivery of ready-mixed concrete to customers in Western Pa.

AGGREGATES AND MATERIALS

Construction lag hits aggregate sales

Marked reductions in housing starts, cutbacks in highway building schedules and a slow-down of general construction activity in some areas brought aggregate and materials sales volume down slightly from 1965.

Forecasts for our three operating areas—Pittsburgh, Cincinnati and Washington, D. C.—anticipate little likelihood of any substantial improvement in the current year. High mortgage interest costs, the tight money situation and deferment of some Federal highway and other construction plans will continue to affect sales of all types of building materials.

In Pittsburgh, the only location where we market ready-mixed concrete, sales of this product were considerably below the previous year. Sand and gravel volume was down by a small percentage, while concrete block sales held about even with 1965. A number of steps were taken to improve product quality, production efficiency and customer service. These included new

equipment and process modifications to our principal river dredge, addition of 15 new deck barges and purchase of six eight-yard mixer trucks.

Cancellation of bid-lettings for eight sections of the Interstate Highway System in Ohio hurt sand and gravel sales in the Cincinnati area. Volume fell short of original forecasts, but edged slightly above the previous year with higher sales for industrial and commercial construction. Prospects for the current year are mixed. A sizable backlog of orders was on hand at year end for 1967 delivery, and road maintenance work is expected to be active in the area. The highway program, which could involve substantial tonnages, remains a question mark.

A carpenters' strike in the District of Columbia, followed by a shortage of labor and reduced construction activity, contributed to a decline in sand and gravel sales in Washington, D. C. Our new Potomac River dredge is operating efficiently and contributing to reduction of operating costs.

SYSTEMS, MACHINERY AND EQUIPMENT

New filtration system for steel mill

Dravo-Doyle Company received an order from a midwestern steel producer to engineer and furnish all components for a filtration system that treats water from hot mill rolling operations. It will be the first installation in the United States under our license agreement with Pintsch-Bamag AG, Butzbach, West Germany.

The Pintsch-Bamag filters were developed to meet stringent anti-pollution requirements in effect throughout Western Europe, and more than 100 installations have been made world-wide during the past 10 years. The increasing emphasis on pollution abatement in this country promises a good market potential for this activity.



Dravo-Doyle's rental fleet of truck and crawler cranes was busy during the year on a variety of construction projects.

Equipment sales rise

Sales of industrial equipment were up in such product lines as fans, blowers, pumps, raw water clarifiers, fluid transport systems, ash handling and other equipment and machinery for which Dravo-Doyle acts as sales representatives. The company completed a hot cast iron chip briquetting plant for an automotive foundry and received an order for a hot zeolite system to supply water to high pressure boilers at a midwestern steel plant.

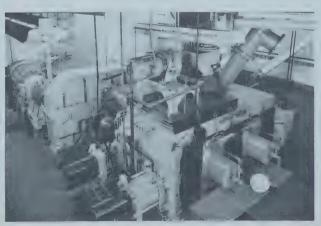
Rental market broadens

Dravo-Doyle also sells new and used construction equipment and is a leading source of rental equipment. Its truck and crawler crane rental fleet is one of the largest in the country. A key factor in 1966's record volume of business was geographical expansion of our rental markets.

Fluid systems combat pollution

Another phase of Dravo Corporation's participation in the pollution-abatement market is the design, engineering and installation of large volume fluid systems related to control and conservation of water and oil in heavy industry. Several such projects were completed during the year, and we are developing ways to expand into other water and waste treatment or related business areas.

Aeropack sewage treatment plant bookings were above those of 1965. A highlight was completion of the first contact stabilization sewage treatment plant in Canada. It serves a community of 5,000 and will also be used as a research project by the University of Toronto in further developing pollution control efforts in Canada. Customers for Aeropack have included commercial establishments, institutions, military bases and smaller municipalities.



Briquetting machine in a plant erected by Dravo-Doyle Co. for Komarek-Greaves & Co. to hot briquett cast iron chips.



Union Barge Line moved this shipment of Kraft paper, used in manufacturing corrugated boxes, from Florida to Pittsburgh.

RIVER TRANSPORTATION

Ton-miles, revenue continue rise

Union Barge Line Corporation and its subsidiary, Southern Transfer Company — which transport commodities over more than 6,200 miles of the Mississippi River System and Gulf Intracoastal Waterway—continued their steady trend of higher gross revenues and cargo tonmiles. Record levels were established in both categories.

Rising equipment, wage and other operating costs, coupled with rate reductions by other modes of transportation, resulted in somewhat reduced earnings. We are combating cost increases with more efficient equipment, heavier loadings and improved operating techniques.

With additions and disposals in 1966, the fleet now consists of seven diesel towboats and more than 350 barges. On order for delivery in the current year are a new 5,200-horsepower towboat and 23 new barges. Plans include the placing of additional equipment orders before the end of 1967.

Varied commodities moved

Transportation for the iron and steel industry continued to account for a sizable portion of revenue. Tonnages were up in bulk liquids carried for petroleum and chemical companies; in agricultural products such as corn, wheat and soybeans; and in movement of imported ores.

Late in the year, a contract was negotiated for Union Barge Line to provide transportation services for Dundee Cement Company. Under the agreement, Union will move this customer's extensive fleet of barges in which cement will be delivered to numerous terminals in midwestern and southern markets.

Prospects for continued growth in water transportation are good. More companies are using the waterways to move larger tonnages of a growing variety of commodities. Barge traffic on America's inland waterways has increased steadily at a rate of about five per cent annually and is expected to continue an upward trend.

CONSULTING ENGINEERING

Bookings, revenue, backlog up

Gibbs & Hill, Inc., New York-based consulting engineering subsidiary, increased its bookings of new business, revenue and backlog in 1966. The company performed work in 16 states and 14 foreign countries, with dollar volume about equally divided between domestic and overseas clients.

Progress was made on three specific objectives: expand the company's already extensive participation in mass transportation; strengthen Gibbs & Hill's position in power generation and transmission; and provide even more diversified and comprehensive engineering services to a wider range of clients.

Mass transportation work varied

Work has been performed for public authorities in New York and Massachusetts on in-depth studies to improve commuter service in the Manhattan and Boston areas. These studies led to assignments for design of modern electrification systems for high-speed rail commuter service and for the associated signaling and communications systems.

A joint study with another firm has been continuing in connection with modernization of the Long Island Rail Road and, based on this work, Gibbs & Hill has begun design of electrification improvements and extension to new lines. Design work on the electrified Haddonfield-Lindenwold Line in New Jersey was completed and supervision of field activity was begun.

Railroad and mass transportation work represented 20 per cent of Gibbs & Hill's revenue in 1966.

Work level high in power field

A contract was received from the Omaha Public Power District covering complete responsibility for engineering, design, procurement and construction management of a 460-megawatt, nuclear generating station to be built near Fort Calhoun, Nebraska. Work continues on



design contracts for nuclear stations in Spain and Switzerland and on two fossil-fueled generating stations in Taiwan and three in Spain. The two nuclear units are the first commercial plants in both countries. The one in Switzerland, a 350-megawatt unit, utilizes the largest pressurized water reactor on the continent.

Numerous other domestic and overseas projects are underway on conventional and nuclear plants. With decades of experience in the electric power generation and transmission field, and the large, competent staff required to undertake this type of work, Gibbs & Hill plans continued expansion of its services to the electric utility industry.

Design for SHAPE

In other fields, a variety of interesting and challenging assignments were underway:

- together with three Belgian firms, design and construction supervision of a \$43-million headquarters complex for Supreme Headquarters Allied Powers Europe (SHAPE);
- feasibility study for a 26-million gallons per day desalination plant in Spain that would be related to two steam electric generating units which Gibbs & Hill designed some years ago;
- management studies on bus transportation systems and corporate management practices for the French ministry of transport;
 - design of a liquefied gas storage plant in Sicily.



Draftsman, engineer and designer are part of technical staff at Gibbs & Hill Espanola, S.A., subsidiary in Madrid, Spain.

Reactor vessel is positioned at Spain's first nuclear power station near Madrid. Gibbs & Hill designed the facility.

RESEARCH AND MARKET PLANNING

Research Center to be expanded

Work is underway on an expansion program that will almost double the size of our Neville Island Research Center, which was built in 1957. The enlarged complex will include a pilot plant for ore and mineral processing; a new mineral and metals process laboratory; and improved concrete and aggregate testing facilities.

The primary purpose of the program is to expand our development activities and help us meet increasing demands for technical services. Much of this relates to our work in process plant design and construction for the iron, steel and mining industries. Tests, studies or pilot operations in these areas were underway in 1966 and initial steps are being taken to broaden our activities in the processing of non-ferrous ores and non-metallic minerals.

Research coordinated with marketing

Our research work is closely coordinated with Dravo's marketing efforts. In its first year as a corporate staff function, our new market development and planning department worked on projects involving light-weight aggregates, export marketing, water management, numerous new business investigations, and studies related to market forecasts and development of business potentials for operating units of the corporation.



Test simulating conditions in blast furnace is one of many aimed at ensuring iron ore pellet quality.

INTERNATIONAL

Growth overseas continues

As noted throughout this report, Dravo's international activities continue to expand. Representing an almost insignificant portion of our business less than 10 years ago, marketing of the company's products and services outside the United States is now contributing a steadily increasing share of new business. We also added to our licensing agreements with European firms and, in turn, licensed additional foreign companies to use Dravo design, engineering and product knowledge.

Design work was initiated on two large coal and ore unloaders which a Rotterdam firm will fabricate and erect for a steel company in Holland. We completed a design and technical assistance contract with the Steel Company of Wales, Ltd., in connection with construction in Wales of two Dravo-type unloaders. We also licensed a Japanese company to manufacture and sell Dravo rope

trolley type bulk materials unloaders in various parts of Asia.

Licensees continue to manufacture and market Dravo heating, ventilating and air conditioning equipment in nine countries. Three European companies were licensed to handle Dravo Aeropack sewage treatment plants.

The continuous casting and strand reduction agreements with the Boehler organization of Austria, and our first contract employing the Pintsch-Bamag AG (West Germany) filtration system technology, were discussed earlier in this report.

Following creation in 1965 of Dravo Pty. Ltd. in Perth, Western Australia, we recently opened a sales office in Sydney. During the past year, a Dravo-Gibbs & Hill European Committee was established to coordinate planning and development activities.

PERSONNEL

Executive changes in 1966

At our annual meeting of stockholders last April, Carl B. Jansen and Lawrence Litchfield, Jr. resigned as directors. Mr. Jansen had been chairman of Dravo and Mr. Litchfield formerly was chairman of Aluminum Company of America. Following the meeting, Robert Dickey III, president and chief executive officer, was elected



chairman of the Executive Committee. The Board also amended the by-laws to combine duties of the chairman with those of the office of president. H. Edgar Lore and Louis P. Struble, Jr., executive vice presidents, were added to the Executive Committee. In November, Admiral Peter Corradi was elected president of Gibbs & Hill, Inc., succeeding the late David B. Sloan.

Changes during the year included appointment of three general managers: Philip J. Berg, Machinery Division; C. Randall Boyer, Fabricated Products Division; and Walter L. Davidson, Engineering Works Division. Chauncey E. Burtch was appointed manager, Eastern District, Contracting Division.

Manpower needs increase

The Company's growth in recent years has created an increasing need for qualified personnel in almost all operating and staff areas.

To help solve this problem, training and development efforts were expanded. More than 500 people participated in machinist, loftsman or pipefitter apprentice programs and in training for welding, fitting and blueprint reading. Supervisory development courses were held for employees of several divisions and depart-

Officers of TOPCO, award-winning Junior Achievement firm sponsored by Dravo, discuss report with President Dickey.

ments. A nine-week refresher course was attended by 41 engineers in preparation for professional engineer registration. A 19-week nuclear engineering seminar was conducted for Gibbs & Hill personnel.

Individual study programs under the tuition refund plan increased 44 per cent, with 188 employees participating. Under this plan, an individual may be reimbursed for 75 per cent of tuition and fees for courses relating to present or future assignments at Dravo.

Increased efforts were made to acquaint college students with career opportunities at Dravo. The 1966-67 college recruiting program was expanded to include more than 30 schools. Last summer, engineering students from 16 colleges and universities worked in various assignments throughout the company. A three-day orientation program for this group featured presentations by Dravo management and field trips to job sites and plant facilities.

We continue to offer equal employment opportunities to all persons qualified to fill existing job openings and, as mentioned before, are expanding efforts to assist employees to upgrade their job skills.

At year end, employment totaled 6,713, up from 6,408 a year earlier. Most of the increase was in field construction forces.

Employee benefits improved

A new formula based on final ten-year average compensation was among changes resulting in increased retirement benefits for certain groups of active and retired employees. In addition, the interest rate on employee contributions was increased, and length of service for eligibility was reduced. Group life, medical and hospitalization coverages were improved and expanded for salaried and many hourly people.

Service awards were presented to 277 members of the Dravo Veterans' Association, which is comprised of 1,256 active and retired employees with 20 or more years of service.

Labor agreements total 50

Sixty-one per cent of Dravo employees are represented by labor unions, with 27 local, 5 state-wide and 18 national collective bargaining agreements now in effect. Seven contracts of up to three years' duration were negotiated during 1966.

Following a four-day strike, new 23-month contracts were signed with Local 61, Industrial Union of Marine and Shipbuilding Workers of America, representing more than 1,400 of the employees of three Dravo divisions and Union Barge Line Corporation. The agreements included wage and fringe benefit improvements.



An IBM S-360 computer replaced smaller 1620 during year.

Injury rate drops 15 per cent

Despite rising employment and increased business activity, accident prevention efforts were more successful. Frequency of serious injuries was 50.8 for every million manhours worked in 1966 compared with 59.7 the previous year, a reduction of 15 per cent. Training programs included fire control instruction for 115 employees at Neville Island and introduction of a mobile motion picture projection unit that was used to present safety films to plant and field personnel throughout the country.

Top honors to Dravo JA company

TOPCO, a Dravo-sponsored Junior Achievement Company comprised of 28 students from Pittsburgh area high schools, was named the best of 5,745 competing J.A. firms in the United States and Canada. They were counseled by four Dravo employee advisors. Manufacturing and marketing Christmas carousels, circle pin jewelry and miniature home fire extinguishers, TOPCO realized total sales of nearly \$3,800 from an initial investment of \$98.

FINANCIAL REVIEW

This report presents consolidated data for Dravo Corporation and Subsidiaries. The principal subsidiaries are listed on the back cover of the report.

Accounting Policy

Much of our business involves long-term, fixed price contracts and, for accounting purposes, we follow the "completed contract" method of reporting. Revenue and profits on such contracts are not reported until the year of physical completion. However, should cost performance indicate that a loss will be experienced, an estimate of the eventual loss is reflected currently.

Revenue

Total revenue in 1966 was \$146.3 million compared with 1965's record \$165.2 million. The decline was due to a lower dollar volume of long-term contract completions. A high level of work was performed on such contracts in 1966, but a sizable portion was on jobs which will not be completed and reported until later periods. Only \$59.2 million of such work was closed out in contrast to the \$83.5 million in 1965. Revenue from manufacturing, transportation, materials, equipment and services rose to \$87.1 million, an increase of \$5.3 million over the previous year.

Billings for work performed by our combined operations, a better measure of our activity level, totaled \$247.0 million, a 29-per cent increase over the previous high of \$191.5 million which was recorded in 1965.

Net Income

Net income of \$3,737,463 was equal to \$3.60 per common share. This compares with income of \$4,805,323 and earnings per share of \$4.65 in 1965. The decline resulted from somewhat lower revenues, higher costs in our heavy fabrication operations and increased financing costs. Interest expense is charged against current operations although much of it is applicable to long-term projects for which profit results are not reported until the year of physical completion.

Dividends

Four quarterly dividends of 40 cents were declared and paid on the common stock. In addition, an extra 40-cent dividend, declared in December, 1965, was paid in January, 1966. This brought total common stock dividend payments in the year to \$2.00 per share. It marked the 26th consecutive year in which quarterly dividend payments have been made. Including \$2.00 per share on preferred stock, total dividends declared in 1966 amounted to \$1,720,575. This represents 46 per cent of net income for the year. In January, 1967, the quarterly common stock dividend was increased from 40 to 50 cents per share, beginning with the first quarterly payment in February.

WORKING CAPITAL	December 31 1966 1965	
	(in mi	llions)
Cash, including certificates of deposit:	\$12.9	\$ 6.4
Marketable securities	1.4	-
Receivables	42.5	32.5
Inventories and contract costs net of billings	.7	15.9
Other assets	.5	.2
Total current assets	58.0	55.0
Notes payable due within one year	.9	9.3
Other current liabilities	30.4	28.5
Total current liabilities	31.3	37.8
Working capital	\$26.7	\$17.2

Long-Term Debt and Working Capital

During the tight money situation which developed in 1966, we entered into a \$25-million revolving credit agreement with our principal banks, in order to provide sufficient funds to finance our high level of activity and to ensure availability of any additional money needed to take advantage of further business opportunities. Notes under this agreement, renewable until August 16, 1968, reached a high of \$19 million during the year, but were reduced to \$14 million by December 31. A schedule of all notes payable is included in the Notes to Financial Statements in this report.

At year end, working capital was \$26.7 million, an increase of \$9.5 million over the \$17.2 million at December 31, 1965. Current assets, as shown by the accompanying summary, were \$3 million above the previous year. The decrease in current liabilities was largely accomplished through borrowings under our revolving credit agreement.

Ratio of current assets to current liabilities at December 31, 1966 was 1.9 compared with 1.5 at the end of 1965.

Property, Plant and Equipment

Expenditures of \$11.5 million compared with \$11.6 million the previous year. Approximately 70 per cent of the total was for buildings, machinery and equipment,

with the major portion going into construction projects and new fabrication facilities. Practically all of the balance represented the cost of new floating equipment for Keystone Division and Union Barge Line. It included 50 barges, 23 of which were yet to be completed at year end. A new towboat was added to Contracting Division's fleet and a towboat was under construction for Union Barge Line.

Backlog

A record \$265.6 million of new bookings contributed to a \$243-million year-end backlog, highest in our history. This compares with \$213.1 million of work on hand at December 31, 1965. Billings of \$166.5 million on contracts still in progress at year end, added to the backlog, make a total of \$409.5 million yet to be reported as revenue when contracts involved are completed.

Financial Position

Our cash position, combined with adequate and guaranteed bank credit, puts us in sound financial position to continue toward higher levels of activity and improved profitability. The record backlog and enlarged, modernized facilities strengthen our efforts to reach these objectives. Equity capital of \$59.2 million compares with \$57.3 million at the end of 1965.

FUNDS STATEMENT

Source	
Net income	\$ 3,737,000
Depreciation	5,658,000
Increase in long-term notes	13,608,000
Sale of fixed assets	1,439,000
	24,442,000
Disposition	
Purchase of fixed assets	11,510,000
Dividends declared	1,720,000
Decrease in reserves	743,000
Increase in long-term receivables	825,000
Purchase of treasury stock	135,000
Other items	59,000
	14,992,000
Increase in working capital	\$ 9,450,000

DRAVO CORPORATION

ASSETS

	December 31		
	1966	1965	
Current Assets			
Cash, including certificates of deposit	\$ 12,929,260	\$ 6,370,411	
Marketable securities	1,395,625	_	
Accounts and notes receivable			
Trade, less allowance for doubtful accounts	41,123,311	31,521,166	
Other, including claims and deposits	1,297,472	968,523	
Inventories			
Materials and supplies	4,271,530	4,304,575	
Finished goods	4,777,287	3,769,100	
Contracts in progress and other work in process	154,356,475	91,026,878	
Advances to joint ventures	3,828,729	3,268,884	
Prepaid expenses	528,390	227,719	
Billings on contracts in progress (deduct)	(166,521,191)	(86,422,146)	
Total Current Assets	57,986,888	55,035,110	
Investments and Other Assets			
Notes receivable—trade, due after one year	811,084	166,691	
Notes from officers and employees for common stock purchases	627,180	447,017	
Miscellaneous	365,041	306,567	
Total Investments and Other Assets	1,803,305	920,275	
Property, Plant and Equipment—at cost			
Land	7,032,145	6,866,581	
Buildings and improvements	12,590,723	11,003,513	
Floating equipment	46,138,497	44,311,652	
Machinery and other equipment	35,213,402	31,138,669	
	100,974,767	93,320,415	
Less accumulated depreciation and amortization	44,052,832	40,811,878	
Total Property, Plant and Equipment—net	56,921,935	52,508,537	
Total Assets	\$116,712,128	\$108,463,922	
The appended notes are an integral part of the financial statements.			

CONSOLIDATED BALANCE SHEET

LIABILITIES AND STOCKHOLDERS' EQUITY

	December 31		
	1966	1965	
Current Liabilities			
Notes payable to banks	\$	\$ 8,400,000	
Current portion of long-term notes	946,762	909,969	
Accounts payable—trade	21,995,605	19,204,097	
Wages and salaries, including vacations	3,024,558	2,686,022	
Income taxes	1,778,925	3,162,318	
Miscellaneous taxes	895,717	994,024	
Dividends	24,870	430,415	
Other current liabilities	2,621,189	1,997,182	
Total Current Liabilities	31,287,626	37,784,027	
Long-term Notes	22,258,702	8,650,464	
Other Liabilities and Reserves			
Repairs and self-insured risks	525,000	550,000	
Deferred income taxes	2,594,000	3,163,000	
Deferred compensation	514,000	663,000	
Minority interest	374,972	376,238	
Total Other Liabilities and Reserves	4,007,972	4,752,238	
Stockholders' Equity			
Preferred stock, \$2 cumulative convertible, no par, stated value \$50			
Authorized: 1966-49,882 shares; 1965-50,100 shares			
Issued: 1966—49,739 shares; 1965—49,957 shares	2,486,950	2,497,850	
Authorized: 2,000,000 shares; Issued: 1,072,850 shares	1,072,850	1,072,850	
Other capital	521,774	511,464	
Earnings retained for use in the business	57,185,519	55,169,146	
	61,267,093	59,251,310	
Less treasury stock at cost			
Common: 1966—62,617 shares; 1965—59,258 shares	2,109,265	1,974,117	
Total Stockholders' Equity	59,157,828	57,277,193	
Total Liabilities and Stockholders' Equity	\$116,712,128	\$108,463,922	

DRAVO CORPORATION CONSOLIDATED STATEMENT OF INCOME AND RETAINED EARNINGS

REIMINED EMININGS			
	Year ended [ecember 31	
	1966	1965	
Revenue			
	\$ 59,215,64 1	\$ 83,472,296	
Construction completed—public, industrial, process and engineering			
Manufacturing, transportation, materials, equipment and services	87,129,390	81,760,204	
Total revenue	146,345,031	165,232,500	
Costs of construction, products and services	128,881,437	146,735,065	
Gross profit	17,463,594	18,497,435	
Selling, administrative and general expenses	10,542,420	10,375,971	
Profit from operations	6,921,174	8,121,464	
Other income			
Dividends and interest	438,411	558,350	
Profit on disposal of capital assets	384,518	133,996	
	7,744,103	8,813,810	
Interest expense	1,516,906	627,270	
	6,227,197	8,186,540	
Provision for income taxes	2,491,000	3,346,000	
	3,736,197	4,840,540	
Minority share of net income	(1,266)	35,217	
NET INCOME FOR THE YEAR	3,737,463	4,805,323	
Cash dividends declared			
Preferred stock	99,486	58,532	
Common stock: 1966, \$1.60 per share; 1965, \$2.00 per share	1,621,089	2,030,894	
To stockholders of Gibbs & Hill, Inc. prior to acquisition	_	38,174	
	1,720,575	2,127,600	
Retained earnings			
Net income for the year, less dividends declared	2,016,888	2,677,723	
Retained earnings at beginning of year	55,169,146	52,491,978	
Net loss on treasury stock transactions	(515)	(555)	
Retained earnings at end of year	\$ 57,185,519	\$ 55,169,146	
The appended notes are an integral part of the financial statements.			

Notes to Financial Statements

Principles of consolidation

All active subsidiaries are included in this consolidation.

Long-term contracts

Long-term contracts are not generally reflected in income until the year of physical completion; however, provision is made for anticipated losses on uncompleted contracts. Cost-plus-fee contracts are reflected as costs are incurred, and units in manufacturing contracts are reflected as each unit is completed.

Inventories and contracts in progress

Cost of inventories and contracts in progress are determined at actual direct costs and overhead approximately at cost, except that the costs of approximately \$18,078,000 of manufacturing and resale inventories are determined by the last-in, first-out method; used tools and equipment are at cost, less estimated depreciation, and certain supplies are valued, generally, at the lower of cost or market.

Contracts in progress having costs in excess of billings are not segregated from those having billings in excess of costs. The possible effect on working capital is not felt to be material, and the presentation herein, in the opinion of the auditors, has substantial authoritative support.

Notes payable

Under the terms of a revolving credit agreement with banks, certain notes payable are renewable until August 16, 1968. A summary of all notes payable follows:

	Current	one year
Revolving credit agreement	\$ —	\$14,000,000
Installment notes to 1975	660,000	5,250,000
Installment notes to 1976	60,000	495,000
Installment notes to 1981	181,828	2,409,032
Mortgage notes	44,934	104,670
	\$946,762	\$22,258,702

Notes totalling \$2,834,604 are secured by property having a net book value of \$3,912,171.

Federal income taxes

The provision for taxes is deemed adequate for all open years, and settlement has been substantially reflected through 1963.

Retirement plan

Including current amendments, the remaining unfunded prior service costs at December 31, 1966 are estimated at \$6,394,000.

Stock options

Options for 300 common shares at a total price of \$8,326 were exercised during the year. The Company elected to cover these purchases with treasury shares rather than unissued shares. At December 31, 1966, there remain 5,020 unissued common shares reserved under the stock option plan, for options granted for 1,100 shares at \$24.23 per share, 2,000 shares at \$24.38 per share and 1,920 shares at \$34.80 per share which become exercisable within seven years. No further options will be granted under this Restricted Stock Option Plan, due to amendments to the Internal Revenue Code in 1964.

Capital stock and other capital

During the year, 218 of the preferred shares were converted to common shares, using common treasury shares in the exchange. As a result, other capital was credited with \$10,310, representing the excess of stated value of the preferred shares over the par value of the common shares exchanged, less a pro-rata portion of the excess of purchase price over par value of the treasury shares used.

Of the unissued common shares, 49,739 shares are reserved for conversion of the preferred stock outstanding.

Contingent liability

The Company is contingently liable in the amount of \$3,766,967 on notes secured by mortgages and lease-purchase option agreements sold to banks with provisions for repurchase.

Accountants' Report

MAIN LAFRENTZ & Co.

CERTIFIED PUBLIC ACCOUNTANTS

To the Stockholders of Dravo Corporation

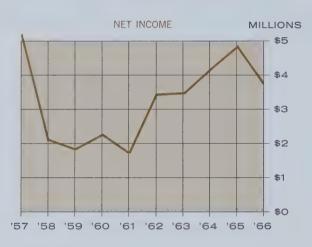
We have examined the consolidated balance sheet of Dravo Corporation as of December 31, 1966 and the related consolidated statement of income and retained earnings for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

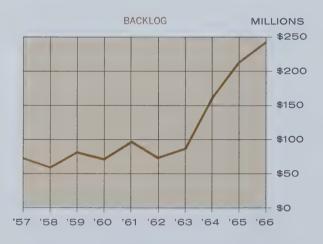
In our opinion, the accompanying balance sheet and statement of income and retained earnings present fairly the financial position of Dravo Corporation and its consolidated subsidiaries at December 31, 1966 and the results of their operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

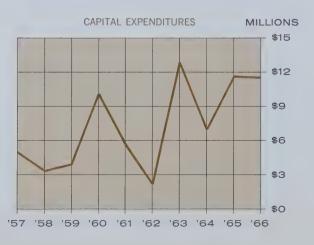
Main Lafrent + Co.

Pittsburgh, Pennsylvania February 6, 1967







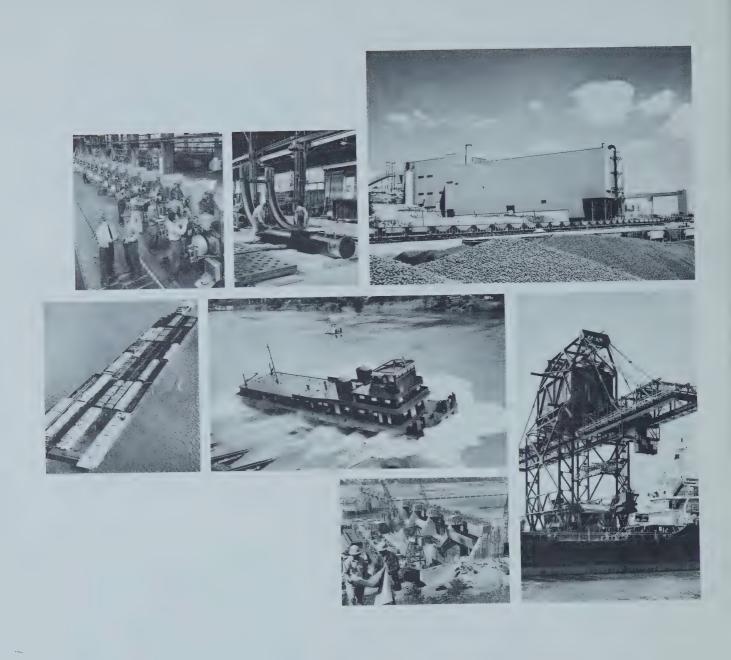


	1966
Revenue (work completed)	\$146,345
Income before taxes	\$ 6,228
Taxes on income	2,491
Net income after taxes	3,737
Dividends declared	1,720
Earnings reinvested	2,017
Per common share	
Earnings	\$ 3.60
Cash dividends declared	1.60
Stock dividend	_
Book value	56.10
Billings for work performed	\$247,018
Backlog of unbilled business	242,955
Total assets	\$116,712
Working capital	26,699
Long-term debt	22,259
Stockholders' equity	59,158
Property, plant, equipment	
Expenditures	\$ 11,510
Cost	100,975
Net book value	56,922
Depreciation	5,658
Stockholders at year end	3,751
Employees at year end	6,713

TEN YEAR SUMMARY......1957-1966

(dollar amounts, except per-share figures, in thousands)

1965	1964	1963	1962	1961	1960	1959	1958	1957
\$165,232	\$114,098	\$123,961	\$130,792	\$ 87,503	\$ 99,072	\$92,298	\$124,815	\$107,202
\$ 8,151	\$ 7,388	\$ 6,875	\$ 6,764	\$ 3,570	\$ 4,626	\$ 3,357	\$ 4,128	\$ 9,992
3,346	3,223	3,425	3,340	1,843	2,405	1,543	2,082	4,800
4,805	4,165	3,450	3,424	1,727	2,221	1,814	2,046	5,192
2,128	1,814	1,576	1,590	1,080	1,098	1,110	1,111	1,107
2,677	2,351	1,874	1,834	647	1,123	704	935	4,085
\$ 4.65	\$ 3.96	\$ 3.34	\$ 3.28	\$ 1.62	\$ 2.07	\$ 1.66	\$ 1.88	\$ 4.79
2.00	1.65	1.50	1.50	1.00	1.00	1.00	1.00	1.00
2.00	1.05	1.50	1.50	1.00	1.00	1.00	1.00	3%
54.04	51.61	50.41	48,50	46,45	45.60	44.25	43.60	42.60
34.04	51.01	50.41	40.50	40.43	45.00	44.23	45.00	42.00
\$191,475	\$160,516	\$100,678	\$139,148	\$100,496	\$100,264	\$85,798	\$112,550	\$130,267
213,107	160,909	85,660	72,391	96,014	70,464	80,332	58,502	72,184
\$108,464	\$ 91,630	\$ 86,556	\$ 79,579	\$ 73,416	\$ 69,863	\$62,892	\$ 60,435	\$ 68,776
17,251	20,615	26,416	23,821	20,497	16,621	23,008	22,404	22,379
8,650	5,890	13,361	6,436	7,168	_	-	_	
57,277	55,768	52,391	50,936	49,306	49,098	48,367	47,664	47,367
A 44 505						* • • • • • •	A 2220	# 4.000
\$ 11,625	\$ 6,976	\$ 12,856	\$ 2,229	\$ 5,692	\$ 10,111	\$ 3,933	\$ 3,338	\$ 4,982
93,320	83,805	77,976	67,304	70,701	67,234	57,771	54,264	51,566
52,509	45,916	43,278	34,560	36,992	34,105	27,214	26,318	26,000
4,482	4,076	3,428	3,394	2,448	2,952	2,885	2,858	2,762
3,554	2,995	2,512	2,482	2,414	2,215	2,086	2,013	1,890
6,408	5,627	4,158	4,036	4,149	3,833	3,918	4,306	5,869



PRINCIPAL ACTIVITIES OF DRAVO CORPORATION

Founded in 1891, Dravo today is a highly diversified complex of enterprises serving both private industry and government. The specialized capabilities of these related activities can be combined into a unified effort to undertake contracts requiring a variety of skills. A typical project could include a process plant with its power plant and other utilities, terminal, docks, materials handling facilities and roads. This coordinated approach—including feasibility studies, engineering design, development services, procurement, construction and fabrication of components—can be applied on a total responsibility basis.





CONSTRUCTION

Engineering, Process, Public Works, Industrial

Process and engineering construction includes plants for pelletizing, sintering, briquetting, basic oxygen steelmaking, continuous casting, lime burning, hydrochloric acid pickling and acid regeneration, hot blast cupolas, vacuum degassing and mechanical construction such as boiler and power plants, and piping and machinery installations.

Marine, underground and other heavy construction work—public and private—includes navigation locks and dams, hydroelectric, flood control and irrigation dams, bridge foundations and piers, tunnels, shafts, slopes, port installations, harbors and harbor improvements, docks, water intakes, dredging and foundations.

MANUFACTURING

Shipbuilding, Materials Handling, Fabricated Products

Towboats, tugs, barges, dredges, floating cranes and other vessels for river, harbor and coastal operations are built in the shipyard at Pittsburgh. Marine repair work is also performed. Other products include ore and coal unloaders, bucket wheel machines, gantry and container cranes, stocking and reclaiming bridges, hoists, ladle transfer and scrap charging cars, shaking ladles, vibrating conveyors and screens, and pelletizing and mixing discs.

The extensive fabricating and machining facilities at Pittsburgh also produce proprietary equipment and components used in systems sold by other company units as well as specialized equipment and machinery for industry and government.

Steel and aluminum grating and industrial space, makeup air and process heating and air conditioning equipment are manufactured in Pittsburgh and sold nationally through company offices and franchised dealers. Licensees manufacture Dravo heaters in Canada, Mexico, South America, Australia and Europe.

A modern plant in Marietta, Ohio, fabricates high and low pressure piping for the utility, chemical, nuclear and other industries.

AGGREGATES AND MATERIALS

Sand, Gravel, Concrete

Dravo is a major producer of sand and gravel in Cincinnati, Washington, D.C. and in Pittsburgh. Ready-mixed concrete is marketed in the metropolitan Pittsburgh area.

RIVER TRANSPORTATION

Common Carrier and Contract Towing Services

Union Barge Line Corporation and its subsidiary, Southern Transfer Company, provide common carrier and contract towing services throughout the Mississippi River system and operate a river-rail-truck transshipment and storage facility at Memphis. Pittsburgh district contract towing is conducted on the upper Ohio, Allegheny and Monongahela rivers by Keystone Division.

SYSTEMS, MACHINERY AND EQUIPMENT

Industrial, Municipal, Construction

Fluid systems are designed, engineered and installed for lubrication, coolant, filtration, descaling, large hydraulic or waste water recovery installations. Dravo Aeropack sewage treatment systems provide compact, economical waste treatment. Dravo-Doyle Company is a sales and rental agency for new and used contractors' equipment and, from Pittsburgh and Cleveland offices, represents a number of manufacturers for the sale of industrial machinery, water and waste treatment plants and equipment. It also engineers and furnishes plant recycle and process water systems.

CONSULTING ENGINEERING

Industrial, Utility, Transportation, Public Works

The scope of Gibbs & Hill services includes technical and economic feasibility and planning studies; site investigations; project engineering and design; preparation of specifications and bid analyses; construction supervision, inspection, expediting and coordination; personnel training, pre-startup tests of components and systems; supervision of startup and plant performance tests; completion reports.

Foreign and domestic work is performed on air and aerospace installations; atomic energy facilities; bridges; electric, gas, oil, compressed air and steam transmission and distribution systems; hydroelectric, conventional, nuclear, gas turbine and diesel generating stations; industrial waste, water and sewage treatment facilities; mass transportation facilities; systems engineering and automation.

Directors



*Robert Dickey III



*John K. Beidler



Davitt S. Bell
President
Edgewater Steel Company



A. Bruce Bowden President, Mellon National Bank & Trust Co.



*Edward T. Fitch



*H. Edgar Lore



Allison R. Maxwell, Jr. President Pittsburgh Steel Company



G. Albert Shoemaker Executive Advisor-Coal Continental Oil Company



*Louis P. Struble, Jr.



Charles E. Walker President Union Barge Line Corp.

*Executive Committee

Officers

Robert Dickey III, President and Chief Executive Officer

John K. Beidler, Senior Vice President

Edward T. Fitch, Senior Vice President

H. Edgar Lore, Executive Vice President

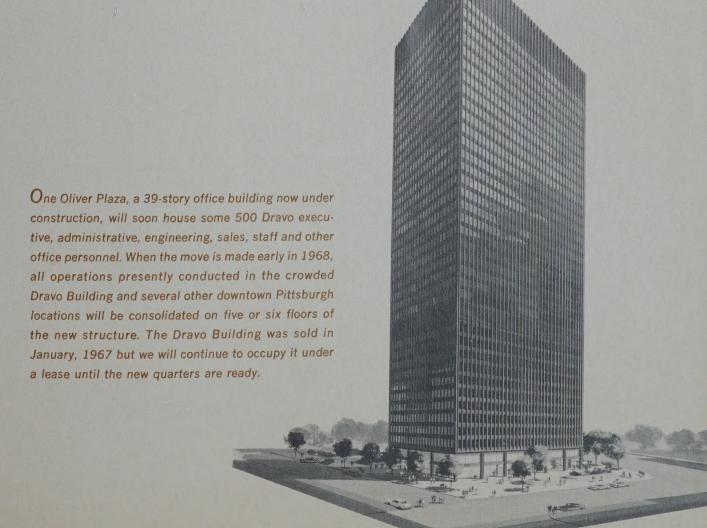
Louis P. Struble, Jr.
Executive Vice President

Edward R. Hyde, Vice President, Materials

John S. Mason, Secretary and General Counsel

Ivan L. Hillman, Treasurer

Joseph V. Newman, Controller





Divisions

Contracting Division
Engineering Works Division
Fabricated Products Division
Keystone Division
Machinery Division
Ohio Gravel Division

Subsidiaries

Dravo of Canada Limited Dravo Construction Ltd. Toronto, Ont.

Dravo-Doyle Company Pittsburgh, Pa.

Dravo Pty. Ltd.
Perth, Western Australia

Gibbs & Hill, Inc. New York, N. Y.

Potomac Sand and Gravel Company Washington, D. C.

Southern Transfer Company Memphis, Tenn.

Union Barge Line Corporation Pittsburgh, Pa.

Zeni-McKinney-Williams Corporation Morgantown, W. Va.